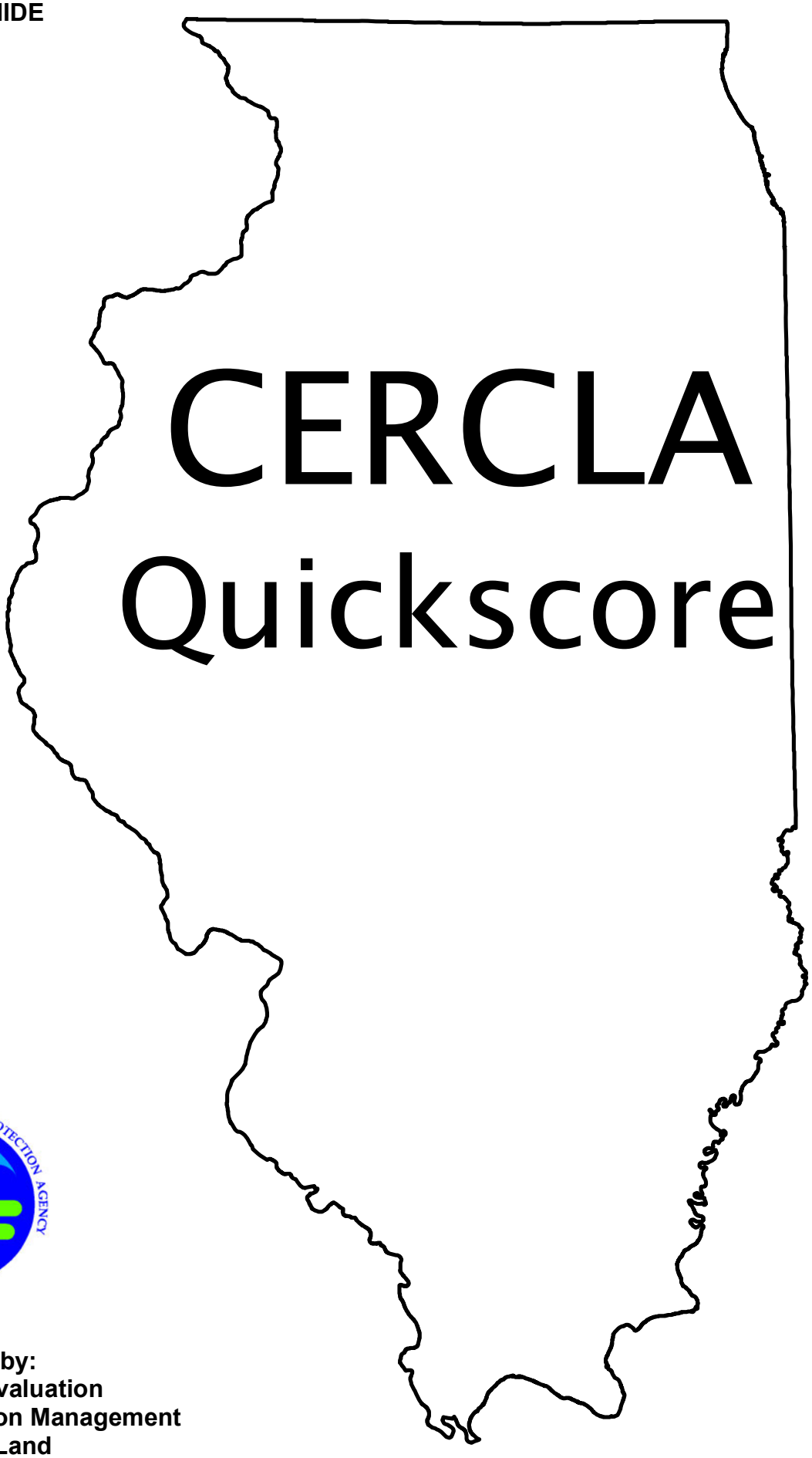
AMERICAN CYANAMIDE
WILL COUNTY
JOLIET, ILLINOIS
LPC#1978090003
SUPERFUND/ HRS
ILD000675264

975246



CERCLA Quickscore

Prepared by:
Office of Site Evaluation
Division of Remediation Management
Bureau of Land

non responsive

non responsive

[redacted]

****** CONFIDENTIAL ******
******PRE-DECISIONAL DOCUMENT ******
****** SUMMARY SCORESHEET ******
****** FOR COMPUTING PROJECTED HRS SCORE ******

****** Do Not Cite or Quote ******

Site Name: American Cyanamide Company Region: Region 5

Scenario Name: Site Reassessment (Manganese)

City, County, State: Joliet, Will County, Illinois, Illinois Evaluator: Lee Crank

EPA ID#: ILD 000675264 Date: 09/08/2020

Lat/Long: 41° 30' 00", -88° 05' 10"

Congressional District: 11

This Scoresheet is for: Other

Scenario Name: Site Reassessment (Manganese)

Description:

	S pathway	S^2 pathway
Ground Water Migration Pathway Score (S_{gw})	30.74	944.95
Surface Water Migration Pathway Score (S_{sw})	0.0	0.0
Soil Exposure and Subsurface Intrusion Pathway Score (S_{sessi})	0.0	0.0
Air Migration Score (S_a)	0.0	0.0
$S^2_{gw} + S^2_{sw} + S^2_s + S^2_a$		944.94
$(S^2_{gw} + S^2_{sw} + S^2_s + S^2_a)/4$		236.23
$/ (S^2_{gw} + S^2_{sw} + S^2_{sessi} + S^2_a)/4$		15.36

Pathways not assigned a score (explain):

TABLE 3-1 --GROUND WATER MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned	
Aquifer Evaluated: Silurian Dolomite			
Likelihood of Release to an Aquifer:			
1. Observed Release	550	0.0	
2. Potential to Release:			
2a. Containment	10	9.0	
2b. Net Precipitation	10	10.0	
2c. Depth to Aquifer	5	3.0	
2d. Travel Time	35	15.0	
2e. Potential to Release [lines 2a(2b + 2c + 2d)]	500	252.0	
3. Likelihood of Release (higher of lines 1 and 2e)	550		252.0
Waste Characteristics:			
4. Toxicity/Mobility	(a)	100.0	
5. Hazardous Waste Quantity	(a)	10.0	
6. Waste Characteristics	100		6.0
Targets:			
7. Nearest Well	(b)	20.0	
8. Population:			
8a. Level I Concentrations	(b)	0.0	
8b. Level II Concentrations	(b)	0.0	
8c. Potential Contamination	(b)	1632.5	
8d. Population (lines 8a + 8b + 8c)	(b)	1632.5	
9. Resources	5	5.0	
10. Wellhead Protection Area	20	20.0	
11. Targets (lines 7 + 8d + 9 + 10)	(b)		1677.5
Ground Water Migration Score for an Aquifer:			
12. Aquifer Score [(lines 3 x 6 x 11)/82,5000][c]	100		30.74
Ground Water Migration Pathway Score:			
13. Pathway Score (S_{gw}), (highest value from line 12 for all aquifers evaluated)[c]	100		0.0

[a] Maximum value applies to waste characteristics category

[b] Maximum value not applicable

[c] Do not round to nearest integer

TABLE 5-1 --SOIL EXPOSURE COMPONENT SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned	
Likelihood of Exposure:			
1. Likelihood of Exposure	550		
Waste Characteristics:			
2. Toxicity	(a)	0.0	
3. Hazardous Waste Quantity	(a)		
4. Waste Characteristics	100		0.0
Targets:			
5. Resident Individual	50		
6. Resident Population:			
6a. Level I Concentrations	(b)	0	
6b. Level II Concentrations	(b)	0	
6c. Population (lines 6a + 6b)	(b)	0	
7. Workers	15	0.0	
8. Resources	5		
9. Terrestrial Sensitive Environments	(c)		
10. Targets (lines 5 + 6c + 7 + 8 + 9)	(b)		0.0
Resident Population Threat Score			
11. Resident Population Threat Score (lines 1 x 4 x 10)	(b)		0.0
Nearby Population Threat			
Likelihood of Exposure:			
12. Attractiveness/Accessibility	100	0.0	
13. Area of Contamination	100	5.0	
14. Likelihood of Exposure	500		0.0
Waste Characteristics:			
15. Toxicity	(a)	0.0	
16. Hazardous Waste Quantity	(a)	0.0	
17. Waste Characteristics	100		0.0
Targets:			
18. Nearby Individual	1	0.0	
19. Population Within 1 Mile	(b)	0	
20. Targets (lines 18 + 19)	(b)		0
Nearby Population Threat Score			
21. Nearby Population Threat (lines 14 x 17 x 20)	(b)		0.0
Soil Exposure Component Score:			
22. Pathway Score[d] (S_{se}), [lines (11+21)/82,500, subject to max of 100]	100		

[a] Maximum value applies to waste characteristics category

[b] Maximum value not applicable

[c] No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60

[d] Do not round to nearest integer

TABLE 5-11 --SUBSURFACE INTRUSION COMPONENT SCORESHEET

Factor Categories and Factors	Maximum Value	Value Assigned	
Likelihood of Exposure:			
1. Observed Exposure	550	0.0	
2. Potential for Exposure			
2a. Structure Containment	10	1.0	
2b. Depth to contamination	10	0.0	
2c. Vertical Migration	15	1.0	
2d. Vapor Migration Potential	25	0.0	
3. Potential for Exposure (lines 2a * (2b+2c+2d), subject to a maximum of 500)	500	1.0	
4. Likelihood of Exposure (higher of lines 1 or 3)	550		1.0
Waste Characteristics:			
5. Toxicity/Degradation	(a)		
6. Hazardous Waste Quantity	(a)		
7. Waste Characteristics (subject to a maximum of 100)	100		
Targets:			
8. Exposed Individual	50		
9. Population:			
9a. Level I Concentrations	(b)	0	
9b. Level II Concentrations	(b)	0	
9c. Population within an Area of Subsurface Contamination	(b)	0.0	
9d. Total Population (lines 9a + 9b + 9c)	(b)	0	
10. Resources	5	0.0	
11. Targets (lines 8 + 9d + 10)	(b)		0
Subsurface Intrusion Component Score:			
12. Subsurface Intrusion Component (lines 4 x 7 x 11)/82,500[c] (subject to a maximum of 100)	100		
Soil Exposure and Subsurface Intrusion Pathway Score:			
13. Soil Exposure Component + Subsurface Intrusion Component (subject to a maximum of 100)	100		

[a] Maximum value applies to waste characteristics category

[b] Maximum value not applicable

[c] No specific maximum value applies to factor. However, pathway score based solely on terrestrial sensitive environments is limited to a maximum of 60

TABLE 6-1 --AIR MIGRATION PATHWAY SCORESHEET

Factor categories and factors	Maximum Value	Value Assigned
Likelihood of Release:		
1. Observed Release	550	
2. Potential to Release:		
2a. Gas Potential to Release	500	
2b. Particulate Potential to Release	500	
2c. Potential to Release (higher of lines 2a and 2b)	500	
3. Likelihood of Release (higher of lines 1 and 2c)	550	
Waste Characteristics:		
4. Toxicity/Mobility	(a)	
5. Hazardous Waste Quantity	(a)	
6. Waste Characteristics	100	
Targets:		
7. Nearest Individual	50	
8. Population:		
8a. Level I Concentrations	(b)	
8b. Level II Concentrations	(b)	
8c. Potential Contamination	(c)	
8d. Population (lines 8a + 8b + 8c)	(b)	
9. Resources	5	
10. Sensitive Environments:		
10a. Actual Contamination	(c)	
10b. Potential Contamination	(c)	
10c. Sensitive Environments (lines 10a + 10b)	(c)	
11. Targets (lines 7 + 8d + 9 + 10c)	(b)	
Air Migration Pathway Score:		
12. Pathway Score (S_a) [(lines 3 x 6 x 11)/82,500][d]	100	

[a] Maximum value applies to waste characteristics category

[b] Maximum value not applicable

[c] No specific maximum value applies to factor. However, pathway score based solely on sensitive environments is limited to a maximum of 60.

[d] Do not round to nearest integer